

INSTRUCTIONS ON THE INSTALLATION OF BLOWN FIBRE (Range Extending using the Coiler)

Description

- This document details the user instructions for the installation of MK2 Blown Fibre Units using the Sirocco Blowing Head. This document details the operation of Range Extending using the Coiler.
- When installing 2 or 4 fibre EPFU the same fibre guides within the blowing head can be used. When installing an 8 or 12 fibre unit it is necessary to change the fibre guides.
- **All operators must comply with any local statutory Health and Safety regulations.**
- **Working with compressed air is potentially dangerous and any operator following these procedures must have successfully completed a Prysmian Cables & Systems UK Ltd approved training course.**

Equipment Required

Equipment Required:	Part No.
Equipment as detailed in document: Ref: OI - 011	
Plus items required are:	
Close Down Assembly	XBFSC00041
Inverter Pan	XBFSC00009
Blown Fibre Coiler	XBFSC00008
Pan Guide	XBFSC00043
Pan Guide Support	XBFSC00055
110v Power Supply	n/a

Equipment

Close Down Assembly

Qty 1



Inverter Pan

Qty 1



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Equipment (contd.)

Blown Fibre Coiler Qty 1 	Pan Guide Qty 1 
Pan Guide Support Qty 1 	110v Power Supply (transformer) Qty 1 

Summary

An installation, utilising Range Extending Techniques for distances greater than those recommended, potentially has many parts. The first part can be considered a 'Point to Point' installation and the procedure therefore is documented in procedure **OI – 001**.

The second and subsequent parts of an installation using these Range Extending Techniques are detailed in this document, and cross-references procedure **OI – 001**.

N.B.
Having completed the first half of the installation of the fibre unit, the settings on the Blowing Head remain the same for the second part of the installation. There is no adjustment required.

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Blowing Head Preparation

Refer to procedure **OI – 001**, and follow steps 1 – 29.

Proving the Route

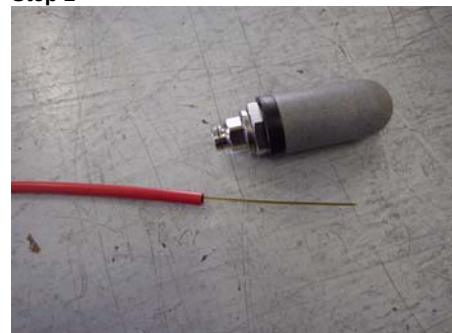
The route should be proved using the **Sirocco Tube Integrity and Length Tester (STILT)**, this will determine the length, and whether there are any air leaks along the route. These procedures are detailed in procedure **OI – 002**. Upon completion of this refer to procedure **OI – 001** and follow steps 31 – 41.

Installing the Fibre Unit

Refer to procedure **OI – 001**, and follow steps 42 – 67.

Coiling the Fibre Unit

Step 1



- Having blown in the first part of the fibre unit (as detailed in document OI – 001), remove the Air Stone and blow through a further 4 or 5 metres.

Step 2



- Site the base of the coiler on a level surface in line with the tube end bearing the fibre unit, and ideally, within 2 – 3 metres of the tube end. Uncoil the lead in the base of the coiler

Step 3



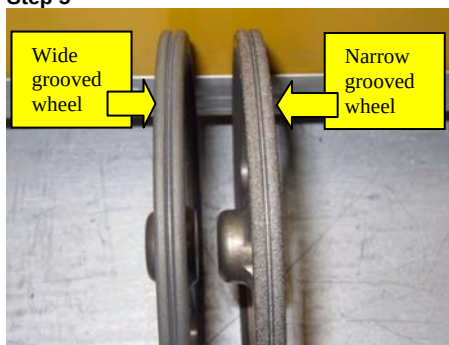
- Release the four catches and remove the TOP end from an empty Inverter Pan. Place the Pan over the coiler.

Step 4



- Secure the Pan Guide Support to the Inverter Pan.

Step 5



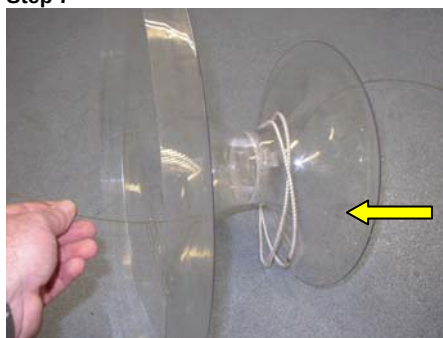
- Ensure the correct wheel is fitted to the coiling head.
- NB. The wheel with the narrower groove is for 2 and 4-fibre unit, and the wider grooved wheel is for 8 and 12 fibre unit.

Step 6



- Locate the coiler head on the drive spindle of the coiler. Press the locking knob through the aperture at the back of the head to drop the head assembly fully down onto the drive spindle. Hold the feed wheel and rotate the head assembly until the head locks with a definite click.

Step 7



- Pass the end of the 4 or 5 metres of fibre unit through the Pan Guide.

Step 8



- The end of the fibre unit should be taped to the floor of the pan. Position the fibre unit between the wheel and the guide rollers.

Step 9



- Place the Pan Guide onto the Support frame and secure in place.

Step 10



- Connect the leads from the 110v power supply and from the coiler to the control unit.

Step 11



- Ensure the reset button has zeroed the length indicator, and that the on / off switch is in the OFF position

Step 12

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- Back at the blowing position re-start blowing the fibre unit.
- At the same time, at the coiling end, switch on the coiler. As the fibre is blown in the coiler will coil the fibre unit into the Inverter Pan for the next part of the installation.

Step 13

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- When the required amount of fibre unit has been coiled, stop the blowing operation and stop the coiler.

Step 14



- Using the finger grip, gently pull the roller chain away from the feed wheel and remove the fibre unit.

Step 15



- Remove the Pan Guide and lay on its side, ensuring no damage to the fibre unit.

Step 16



- Remove the Pan Guide Support from the Pan passing the fibre unit through the gap in the belt of the support.

Step 17



- Remove the head assembly from the base of the coiler by pressing the locking knob and lifting the head upwards. To prevent damage always store head in box after use.

Step 18

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- Carefully lift the Inverter Pan off the base of the coiler.

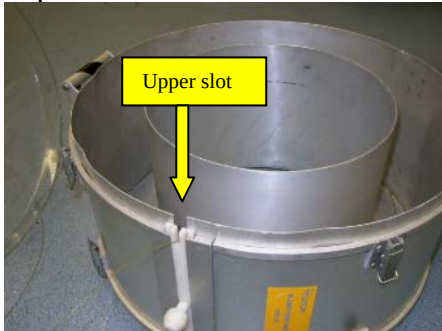
Operating the Inverter Pan

Step 19

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- If the pan is to be moved for the second blowing operation, withdraw sufficient fibre unit to allow for this.

Step 20



- Place the fibre unit emerging from the pan in the upper slot of the sliding door.

Step 21



- Replace the TOP end of the Inverter Pan, taking care not to trap the fibre unit, and secure the four catches.

Step 22

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- With the sliding door on the far side of the pan, lift the pan using its handles and turn it upside down smartly whilst keeping the sliding door on the opposite side.

Step 23



- Lower the pan to the ground and check that the fibre unit is not trapped beneath the pan. The BOTTOM end of the pan will now be uppermost.

Step 24



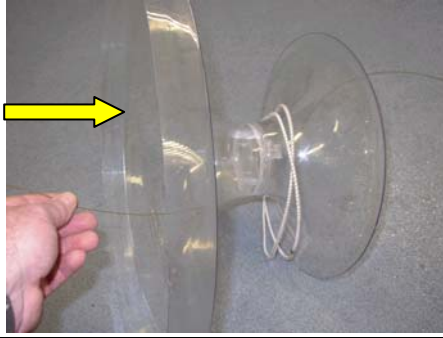
- Remove the BOTTOM of the pan and the end of the fibre unit will be taped to the inside.

Step 25



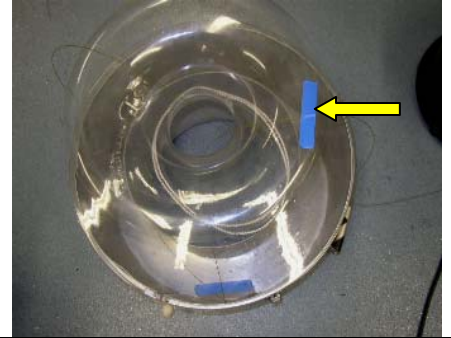
- Take the fibre unit out of the slot in the sliding door and secure to the underside of the Pan Guide with tape.

Step 26



- Pass the END of fibre unit through the Pan Guide.

Step 27



- Place the Pan Guide onto the Pan and secure the first length of installed fibre to the top of the Pan Guide as shown.

Step 28

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- The Blowing Head is now moved to, what was the coiling end, and set up ready for onwardly blowing the fibre unit.

Step 29



- A Close Down Assembly is fitted to the tube into which the fibre unit is about to be blown.

Step 30

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- If the installation requires more blow on and coil procedures then at this stage, re-site the coiler at the next coiling position and repeat steps 1 – 35 of this document.

Proving the Route

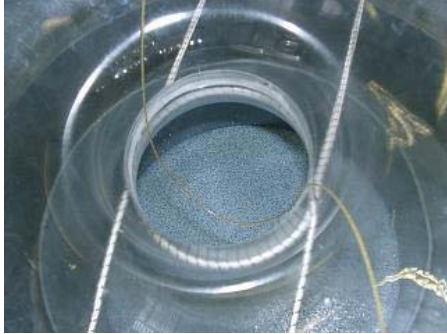
The route should be proved using the **Sirocco Tube Integrity and Length Tester (STILT)**, this will determine the length, and whether there are any air leaks along the route. These procedures are detailed in procedure **OI – 002**. Upon completion of this refer to procedure **OI – 001** and follow steps 31 – 41.

Installing the Fibre Unit

Refer to procedure **OI – 001**, and follow steps 42 – 60.

Closing Down at the Blowing Position

Step 31



As the fibre unit is installed into the route the last few coils will leave the pan, slow the installation speed down and remove the two pieces of tape securing the original side of the fibre unit to the pan guide, and allow the fibre to run freely out of the pan.

Step 32



- Inch in the last few metres of the fibre unit whilst holding the rear tube, until this tube is pulled **just up against** the back of the blowing head, ensuring no strain is put on the fibre.

Step 33

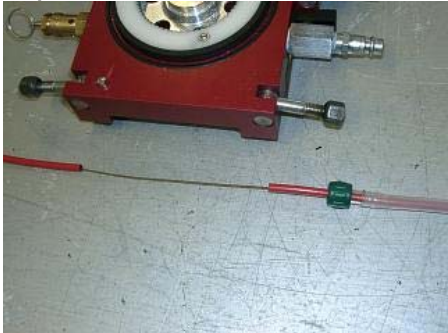


- At this point, turn the installation speed control to 0 and turn off the air at the compressor valve.

Refer to procedure **OI – 001** and follow steps 62 through 67

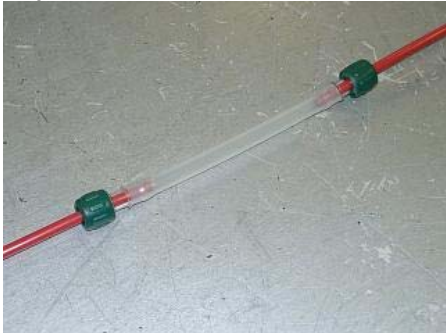
Closing Down at the Blowing Position (contd).

Step 34



- Carefully remove the blown fibre tube and fibre unit from the blowing head whilst maintaining the gap left by the blowing head between the tubes.

Step 35



- Remove the split 'O' ring from the tube, and slide the Close Down Assembly along the tube to cover the gap in the tube. Tighten in place.